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Subject: Wartime Binder Twine for 1944 Harvest

Field Distribution: War Board members, Extension Editors, AAA Committeemen, BAE Analysts, FDA Marketing Reports Chiefs, SCS, FSA, FCA Regional Information Chiefs

Suggested Use: Background Information.

For many years binder twine, rope and other products have been made from hard fibers known as manila, sisal and henequen, and in a world of peace there are plenty of these fibers to meet all demands.

The Japanese brought the war close to the farmers when early in 1942 they captured the Philippine Islands and the Dutch East Indies, and absolutely cut off our largest sources of supply for manila. Japanese conquests also limited substantially the available sources for sisal.

Back in 1942 there were stocks of fibers on hand, hence the binder twine used in that year was made from the customary types of fibers. During the same year, however, these supplies of fibers also had to be made available for the manufacture of rope for the Army, Navy, Maritime Commission and War Shipping Administration. As a consequence, the War Production Board in the early part of 1943, issued a general preference order covering Agave Fibers, which prohibited the use of sisal in the manufacture of binder twine, but permitted the use of other types of agave fibers, particularly henequen. Another order restricted the use of manila to essential military needs. Since the quantities of henequen obtained were inadequate for binder twine needs, other fibers that the Government could buy and that the manufacturer could use, were required to supplement supplies of henequen set aside for binder twine purposes.

In 1943, under a program conducted by the War Food Administration in collaboration with the War Production Board, American manufacturers blended cotton yarn with henequen to produce a satisfactory type of binder twine. For 1944, however, cotton will not be available due to the necessity of using all cotton yarn production in the manufacture of work clothes for defense plant and farm workers, as well as war equipment for the Army and Navy.

Looking ahead to 1944, the War Production Board officials conducted experiments in the summer of 1943 to determine the most practicable way of extending the supply of henequen for binder twine use. Blends were made of henequen with various types of paper, with jute, and with other raw materials. Most effective of all combinations, from the standpoint of manufacture, was binder twine made of a henequen-jute mixture.

Before recommending the use of this type of material, rigid field tests were made of the henequen-jute twine. Working with twine processors and a number of cooperating farmers, the War Production Board and the Department of Agriculture tried

the henequen-jute binder twine on fields of tall Iowa corn, where bundles were unusually heavy. The twine tied successfully, and did not break when bundles were handled. Again in Louisiana the henequen-jute binder twine was tried on rice in wet muddy fields. It satisfied the rice growers. The new twine was developed too late to be tested on Mid-Western small grains, but its makers believe that if it handles heavy corn and rice satisfactorily, it should work on wheat, barley, oats and other crops harvested with a binder.

In line with these determinations, the War Production Board has directed each American processor to use jute fiber as an extender for henequen. At present, all binder twine processors are making such twine, using approximately 12-1/2 percent jute fiber and 87-1/2 percent henequen.

The Department of Agriculture suggests that the knotter mechanism on the binder should be in the best possible condition and should be properly adjusted. Tests so far were all made under normal farm conditions with the standard binder and without adjustments, indicating that with ordinary care all binders can use this new war-time twine.

Prices of binder twine are controlled by Office of Price Administration ceilings.